



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096
HELENA, MONTANA 59626-0096

Ref: 8MO

October 27, 2008

Mr. Steve E. Williams, Forest Supervisor
Attn: Doug Epperly, Project Coordinator
Custer National Forest
1310 Main Street
Billings, MT 59105

Re: CEQ 20080395; Sioux Ranger District Travel Management
Plan DEIS

Dear Mr. Williams:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Sioux Ranger District Travel Management Plan and Draft Environmental Impact Statement (DEIS) in accordance with EPA responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major federal agency action. EPA's comments include a rating of both the environmental impact of the proposed action and the adequacy of the NEPA document.

We appreciate the Custer National Forest's and Sioux Ranger District's effort in preparing a Travel Management Plan and DEIS. The EPA has been concerned about the effects of travel management, particularly roads and motorized uses on aquatic and terrestrial ecosystems. We support conduct of travel planning efforts that are intended to better manage and control recreational uses and reduce environmental impacts of such uses on National Forests.

Public recreational demand and access has increased significantly in recent years, and motorized uses and roads in many cases have caused increased damage to aquatic and terrestrial resources. We have been particularly concerned about the increasing use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs) that occur away from roads and trails, including steep slopes, fragile soils, wet meadows, and around water bodies. Newer motorized vehicles such as trail bikes and ATVs can access areas much further into the Forest than they could historically, forcing wildlife onto smaller and smaller patches of habitat, fragmenting habitat and migration corridors, and adversely affecting wildlife security, and causing soil erosion and adverse effects to water quality, aquatic habitat and fisheries, and spreading weeds. Demand for recreation opportunities on public land may be exceeding the capability of the land and resources to provide recreation in a manner that is consistent with resource and ecosystem protection.

It is important that motorized activities be properly managed and controlled so that they occur in a manner and location that is consistent with protection of the environment and other

resources in order to sustain and protect the environment, other resources, and ecosystems for use by future generations. The challenge is in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems. Where there are conflicts between access and recreational use and long-term protection of resources and ecosystems, we believe resource/ecosystem protection must be given priority to sustain and protect resources and ecosystems for use by future generations. We very much support proposed efforts to restrict motorized vehicle use to designated roads and trails.

The preferred alternative, Alternative B, for the Sioux District appears to include more environmentally protective features than the other two alternatives evaluated, no action and Alternative A (i.e., protection of streams, water quality, fisheries, wildlife, etc.). Alternative B would have the highest potential reduction in miles of road with reduced water quality/fisheries risk (186 miles vs. 42 miles with Alternative A and 0 miles under no action); has a beneficial impact to two sensitive aquatic species over Alternative A and no action; has lowest mileage of roads with moderate or high erosion hazard (280 miles vs. 439 miles with Alternative A and 373 miles with no action); lowest weed susceptible acres within the designated road corridor 22,136 acres vs. 34,572 acres with Alternative A and 30,604 acres with no action); and results in greater decreases in road density and increases in wildlife core habitat than other alternatives.

Accordingly, the EPA supports Alternative B, the preferred alternative, over Alternative A and no action. We have the greater environmental concerns with No Action and Alternative A due to increased risk of adverse effects on watersheds, water quality, fisheries and wildlife habitat and security with these alternatives. We recommend, however, that you consider revising or amending Alternative B to include further reductions in motorized routes, particularly routes in areas with high hazard (erosive) soils and in high risk watersheds.

The DEIS states that Alternative B would include 24 miles of actions that would increase risks to water resources, and shows a net increase in risk in the Bull Creek-Cottonwood Creek, Dry Creek, and Gap Creek watersheds (i.e., more miles with increase in risk than decrease in risk). We note that the Dry Creek watershed with an increase in risk is also shown as a high risk watershed. Alternative B would have 165.5 miles of routes designated for public motorized uses on soils with "severe" erosion hazards, and 155.9 miles on soils "poorly suited" for roads and trails. Forty miles of roads and trails would be on landscapes that have a severe erosion hazard rating (14 miles Public use and 26 miles Administrative use). We do not support the addition of new routes with high risk of erosion and water quality impacts to the road system, especially when road maintenance is already inadequate to address resource impacts from existing roads.

We are also concerned about the minimal funding and resources available to properly maintain roads and keep them in fair to good condition to minimize erosion and water quality and fisheries impacts. The DEIS indicates that only a small percentage of roads on the District receive annual maintenance. We believe there is a need to address road conditions that contribute to degraded water quality and aquatic habitat. Reductions in sediment delivery from roads as well as improvements in road drainage and reductions in road density are important for improving watershed conditions and aquatic health in area streams.

The DEIS states that the Travel Plan is a first step in addressing water quality impacts, and that additional actions are needed to address water quality effects of roads and motorized uses. We appreciate this recognition that additional actions are needed, but are concerned about the Forest's ability to implement the needed additional actions on anything close to a timely basis due to lack of resources. We believe it is important to provide adequate funding to carry out additional actions to address water quality effects of roads (some of which are identified in Appendix D). There should be a continuing road inspection, evaluation and maintenance program in place to identify road drainage and BMP needs, and adequate funds to correct road deficiencies. We encourage improved funding for road maintenance and emphasize the need for decommissioning of roads which cause resource damages and which cannot be adequately maintained. We believe road networks should be limited to those that are necessary for access and management, and which can be adequately maintained within agency budgets and capabilities.

We support the effort to have understandable travel maps (Motor Vehicle Use Map, MVUM), and clearer travel management rules for the public, and encourage improved road and trails signs to promote understanding of travel rules, and thus, improved voluntary compliance with the travel plan. We also believe the ability of the Forest to police and enforce restrictions on motorized uses that damage the environment in light of the expanded use off-road vehicles (trail bikes, all terrain vehicles, 4x4 vehicles, etc.) is an important aspect of travel management. Policing and enforcement of travel restrictions is necessary to promote compliance, and ensure protection of water quality, fisheries, wildlife, and other sensitive resources. The discussion of enforcement in the Sioux District Travel Management Plan is improved over that in the Ashland District Travel Management Plan. Although we still have concerns regarding the adequacy of resources to enforce travel restrictions necessary for protection of the environment. We support adding law enforcement personnel to handle the increases in motor vehicle uses that are occurring on the District.

The Plan should also be consistent with Total Maximum Daily Loads (TMDLs) and Water Quality Plans that may be developed to restore water quality and beneficial use support in impaired 303(d)-listed waters in the area (e.g., Little Missouri River, Thompson Creek). The Custer National Forest, Sioux Ranger District should coordinate their travel management planning with the Montana DEQ and South Dakota Dept. of Environment and Natural Resources as well as EPA TMDL staff to assure travel plan consistency with TMDLs and water quality restoration plans being prepared by MDEQ.

The EPA's more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Sioux Travel Management Plan DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Sioux Travel Management Plan DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). The EPA's environmental concerns regard potential effects to water quality, fisheries, wildlife and other resources from roads and motorized uses. A summary of EPA's DEIS rating criteria is attached.

If you have any questions you may contact Mr. Steve Potts of my staff in Helena at (406) 447-5022 or in Missoula at (406) 329-3313, or via e-mail at potts.stephen@epa.gov . Thank you for your willingness to consider our comments at this stage of the process.

Sincerely,

A handwritten signature in black ink, appearing to read "John F. Wardell", written over a horizontal line.

John F. Wardell
Director
Montana Office

Enclosures

cc: Larry Svoboda/Connie Collins, EPA, 8EPR-N, Denver
Mark Kelley/Robert Ray, MDEQ, Helena

EPA Comments on the Draft EIS for the Ashland Ranger District Travel Management Plan

Brief Project Overview:

The Sioux Ranger District of the Custer National Forest proposes to designate a system of roads and trails for public motorized use. In addition, some unauthorized (non-system) routes could be converted to system roads and motorized trails, and some system roads may be changed to system motorized trails. The type of vehicle and season of use would also be designated for each system road and motorized system trail. Dispersed vehicle camping distances or site specific restrictions would also be determined. The purpose of the project is to: 1) identify routes for public motorized use on the District, 2) provide for a variety of motorized and non-motorized opportunities, 3) minimize impacts on natural and cultural resources, and 4) have enforceable travel management guidelines that meet the direction of the 2005 Motorized Travel Management Rule. Forest Scale Roads Analysis was completed in 2003.

The Sioux District is located in southeast Montana and northwest South Dakota, and is composed of eight separate geographic units separate from any other National Forest System lands. The District consists of approximately 163,107 acres of National Forest System land, often referred to as, "islands of green in a sea of rolling prairie," with hills or mesas of ponderosa pine rising above rolling grasslands. No action and two action alternatives have been evaluated.

The No Action Alternative consists of designation of the existing system roads (different from Alternative A), and includes the existing vehicle types and seasons of use currently in force on the District. (401 miles of system routes with 399 miles designated for public motorized use, 2 miles for administrative use only, and 104 miles not designated).

Alternative A was developed in response to multiple public comments expressing a desire to designate most or all of the motorized routes identified in the 1999-2000 inventory of the District for public motorized use, and involves designating the majority of both system and non-system routes on the District for public motorized use. Alternative A designates an additional 91 miles of non-system routes for system roads or motorized trails for public motorized use and 10 miles for administrative use; 0.4 miles of existing system roads are not designated for public motorized use or administrative use; 21 miles are identified for administrative use due to no legal public right-of-way and 3 miles due to health and safety concerns with previous mining activities; converts 201 miles of system roads to motorized trail; designates 116 miles of system roads for mixed motorized use; remove existing season of use designations for 148 miles; and does not designate 10 miles due to dispersed vehicle camping due to health and safety concerns with previous mining activities; and continues the 2001 Tri-State OHV Decision for authorization of

vehicle camping within 300 feet of motorized routes (502 miles of system routes with 466 miles designated for public motorized use, 36 miles for administrative use only, and 3 miles not designated).

Alternative B consists of designating a system of motorized routes that provides the public with motorized recreation opportunities, while addressing resource concerns and recreation opportunity concerns. Primary routes included in this alternative would be designated as roads, or where appropriate, as mixed motorized use roads, and, for the most part, all other routes would be designated as motorized trails. This alternative designates an additional 24 miles of non-system routes for system roads or motorized trails for public motorized use and 42 miles for administrative use; 23 miles of existing system roads are not designated for public motorized use or administrative due to no legal public right-of-way; identifies 21 miles system roads for administrative use due to no legal public right-of-way and 76 miles for other resource or health and safety concerns; converts 73 miles of system roads to motorized trail; designates 57 miles of system roads for mixed motorized use; removes season of use designations on 4 miles; does not designate dispersed vehicle camping due to health and safety concerns with previous mining activities on 10 miles; and continues the 2001 Tri-State OHV Decision for authorization of vehicle camping within 300 feet of motorized routes (444 miles of system routes with 303 miles designated for public motorized use, 141 miles for administrative use only, and 38 miles not designated). The preferred alternative is Alternative B.

Comments:

1. Thank you for providing Summary Tables and Matrices including Tables 2-2 through 2-4 summarizing alternatives; Table 2-5 with forest plan monitoring items relevant for travel management; Tables 2-6 and 2-7 with comparisons of environmental effects of alternatives; as well as clear, large, maps of the alternatives. The summary tables, alternatives descriptions and maps help clarify alternatives, define issues, and provide a basis of choice among alternatives for the decisionmaker and the public as directed by the CEQ's regulations for implementing NEPA (40 CFR 1502.14).

Alternatives

2. Forest Travel Plans are critical elements in the management of National Forests, providing direction to manage road and trail networks for public recreation and conduct of land management activities. Public recreational demand and access has increased significantly in recent years, and motorized uses and roads in many cases have caused increased damage to aquatic and terrestrial resources. We have been concerned about environmental effects of roads and motorized uses, particularly increasing use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs) that occur away from roads and trails, including steep slopes, fragile soils, wet meadows, and around water bodies.

Newer motorized vehicles such as trail bikes, ATVs and snowmobiles can access areas much further into the Forest than they could historically, forcing wildlife onto smaller

and smaller patches of habitat, fragmenting habitat and migration corridors, affecting wildlife behavior and life history functions and adversely affecting wildlife security and increasing wildlife mortality; and causing soil erosion and adverse effects to water quality, aquatic habitat and fisheries; increased dust emissions to air; and spreading weeds. Demand for recreation opportunities on public land may be exceeding the capability of the land and resources to provide recreation in a manner that is consistent with resource and ecosystem protection

The condition of forest road networks, inadequate funding for road maintenance, and environmental effects of motorized travel are also a significant concern of EPA in regard to land management. Roads are often a primary source of human-caused sediment increases, and sediment yields are generally higher from roads than from trails, and from motorized trails than from non-motorized trails.

It is important, therefore, that Travel Plans provide adequate limitations and restrictions on motorized uses to minimize road and motorized travel impacts to watersheds, water quality, fisheries, soil integrity, wildlife habitat/security, spread of weeds, air quality, and overall ecosystem functions. The Forest Service faces a great challenge in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems. Where there are conflicts between access and recreational use and long-term protection of resources and ecosystems, we believe resource/ecosystem protection must be given priority to sustain and protect resources and ecosystems for use by future generations. We fully support efforts to restrict motorized vehicles to designated roads and trails, and better address resource concerns associated with roads and motorized uses.

We support the preferred alternative, Alternative B, over no action and Alternative A, since Alternative B appears to reduce adverse environmental impacts more than the other alternatives (e.g., 186 miles of actions reducing water quality risk, reduces impacts to fish and aquatic species, reduces motorized routes with very high and high erosion hazard ratings, etc., Table 2-7). We have greater environmental concerns with both No action and Alternative A due to increased adverse effects on watersheds, water quality, fisheries and wildlife habitat and security with these alternatives, and also consider Alternative B to be the environmentally preferred alternative.

However, we still recommend that Alternative B be revised or amended to include further reductions in motorized routes, particularly routes in areas with high hazard (erosive) soils. Table 2-6 indicates that Alternative B would increase water quality risks on 24 miles, and has 166 miles of routes on soils with high/very high erosion hazards. We note that Table 3-21 (page 3-74) showing route miles by moderate and high erosion risk watersheds for alternatives indicates that the preferred alternative would increase erosion hazard risks on 34.2 miles and decrease risk on 125 miles, and Table 3-22 (page 3-75) shows that Alternative B would add 23.9 miles of routes with increased erosion hazard risks. While Alternative B is clearly an improvement over no action and Alternative A, we still recommend additional reductions in motor vehicle route designations for and

high/very high hazard soils and reduction of water quality impacts be included in the preferred alternative.

Water Quality/Aquatics

3. Thank you for providing Table 3-19 (page 3-70) with information on watersheds and streams and effects of roads on streams in the District. Table 3-19 indicates that there are many road stream crossings, and 11 watersheds with “high” risk ratings and 16 watershed with “moderate” risk ratings in the analysis area; and shows that there appear to be 224 miles of FS roads and 239 crossings of perennial and intermittent streams in the 11 high risk watersheds.

Motorized uses in general are more likely to accelerate erosional processes and worsen poor road conditions, and increase stream sedimentation and degradation of fisheries habitat when compared to non-motorized uses. Roads/trails often tend to become wider and rutted with heavy motorized use, creating a greater need for monitoring of road/trail conditions, and for road and trail maintenance for repair and erosion control. Sediment yields are generally higher from roads than from trails, and from motorized trails than from non-motorized trails. Travel management changes that will reduce motorized uses, particularly in areas more susceptible to erosion, are likely to reduce water quality impacts. Accordingly, actions that restrict motorized uses for routes with higher watershed risks and erosion hazards, and that address road drainage problems and reduce sediment delivery from roads help reduce the adverse effects to water quality.

As we noted in our earlier comments, we support Alternative B over the other alternatives due to reductions in adverse effects of motorized uses on resources such as water quality. Alternative B proposes actions that result in a decrease in risk for 125 route miles in moderate and high risk watersheds and an increase in risk for 34.2 miles (Table 3-21, page 3-74). Table 3-22 shows that proposed actions in Alternative B would decrease risks on 186 miles, and increase risks on 23.9 miles of routes. It is not entirely clear to us how these risk ratings were developed, but the tables show that Alternative B would reduce risks to water resources more than Alternative A or no action.

While we support Alternative B over no action and Alternative A due to such reductions in risks to water resources, we also believe that additional reductions in motorized routes in high risk watersheds and areas of severe erosion hazards would be warranted. Table 3-21 appears to show 34.2 miles of route miles with increased risks to water resources, and shows a net increase in risk in the Bull Creek-Cottonwood Creek, Dry Creek, and Gap Creek watersheds (more miles with increase in risk than decrease in risk), and the Dry Creek watershed is shown as a high risk watershed. Table 3-22 shows 23.9 miles of routes with increased risks would be added with Alternative B. Tables 3-28 and 3-29 (page 3-95) shows Alternative B would have 165.5 miles of routes designated for public motorized uses on soils with “severe” erosion hazards, and 155.9 miles on soils “poorly suited” for roads and trails. On page 3-96 it is stated that 40 miles of roads and trails (14 miles Public use and 26 miles Administrative use) would be on landscapes that have a

severe erosion hazard rating. We do not support the addition of new routes with high risk of erosion and water quality impacts to the road system, especially when funding for road maintenance is already inadequate to address resource impacts from existing roads and nearby campsites (page 1-11).

We believe it would be appropriate to revise or amend Alternative B to reduce erosion and watershed risks further, particularly reduction of motorized routes on soils with severe erosion hazards and in poorly suited areas and in high hazard watersheds (i.e., Upper and Lower Tie Creek, Speelmon Creek, Upper Crooked Creek, Plum Creek, Bull Creek-Campbell Creek, Dry Beaver, Slick Creek, Little Missouri-K-Bar Creek, Russell Creek, Little Missouri-Waterhole Creek), and do not support the net increases in water resources risks in high risk watersheds proposed with Alternative B (i.e., Dry Creek watershed, Table 3-21).

4. We thank you for providing a table (Table 3-20, page 3-71) identifying streams on Montana's Clean Water Act Section 303(d) list of impaired waters. We did a quick scan of impaired waters in Carter County and in addition to two segments of the Little Missouri River (shown in DEIS Table 3-20), Thompson Creek is also shown as impaired (<http://cwaic.mt.gov/Default.aspx>). It is not clear to us if any portion of Thompson Creek or the Little Missouri River impaired segments may be located on National Forest land. We recommend that the FEIS clarify if any portions of the impaired segments of the Little Missouri River and Thompson Creek are located with the National Forest boundary.

The DEIS states that no South Dakota surface waters within the Forest boundary are designated as impaired by the South Dakota Dept. of Environment and Natural Resources. Portions of South Dakota's impaired South Fork Grand River and South Fork Moreau River are stated to be located well below the Forest boundary (page 3-64).

5. Stream segments designated as "water quality impaired" and/or "threatened" listed on State 303(d) lists require development of a Total Maximum Daily Load (TMDL). A TMDL:

Identifies the maximum load of a pollutant (e.g., sediment, nutrient, metal) a waterbody is able to assimilate and fully support its designated uses; allocates portions of the maximum load to all sources; identifies the necessary controls that may be implemented voluntarily or through regulatory means; and describes a monitoring plan and associated corrective feedback loop to insure that uses are fully supported; Or can also be viewed as, the total amount of pollutant that a water body may receive from all sources without exceeding WQS; Or may be viewed as, a reduction in pollutant loading that results in meeting WQS.

Montana's approach is to include TMDLs as one component of comprehensive Water Quality Plans (WQPs). TMDLs/WQPs contain eight principal components:

1. Watershed characterization (hydrology, climate, vegetation, land use, ownership, etc.)
2. Description of impairments and applicable water quality standards.
3. Pollutant source assessment and estimate of existing pollutant loads, including pollutant loads in tributaries to 303(d) listed waters.
4. Water quality goals/restoration targets.
5. Load allocations (i.e., TMDLs).
6. Restoration strategy
7. Monitoring Strategy
8. Public involvement (30 day public comment period, informational meetings, etc.)

The load allocations and targets established by TMDLs/WQPs inform land managers how much sediment, nutrient or other pollutant discharge may be too much (i.e., prevent support of beneficial uses). A WQP provides a means to track the health of a stream over time. If a WQP has not restored beneficial uses within five years, the Montana DEQ conducts an assessment to determine if:

- * the implementation of new and improved BMPs are is necessary;
- * water quality is improving but more time is needed to comply with WQS; or
- * revisions to the plan will be necessary to meet WQS.

The Montana Dept. of Environmental Quality (MDEQ) and EPA are under a Court Ordered schedule to prepare TMDLs. Montana has divided the State into TMDL Planning Areas, grouping streams with similar water quality problems and land ownership as much as possible on a watershed basis. Each TMDL planning area may include 4 to 10 impaired watersheds that have specific TMDL preparation needs. See <http://www.deq.state.mt.us/wqinfo/TMDL/index.asp> for the latest schedule for preparation of TMDLs in Montana.

Pending completion of a TMDL in Montana, new and expanded nonpoint source activities may commence and continue, provided those activities are conducted in accordance with (MCA 75-5-703). The Administrative Rules of Montana (17.30.602) define these as “methods, measures, or practices that protect present and reasonably anticipated beneficial uses.” “Reasonable soil, land and water conservation practices” include but are not limited to structural and nonstructural controls and operation and maintenance procedures. Appropriate practices may be applied before, during, or after pollution producing activities.

It is important to note that “reasonable soil, land and water conservation practices” are differentiated from BMPs, which are generally established practices for controlling nonpoint source pollution. BMPs are largely practices that provide a degree of protection for water quality, but may or may not be sufficient to achieve Water Quality Standards and protect beneficial uses. “Reasonable soil, land and water conservation practices” include BMPs, but may require additional conservation practices, beyond BMPs to

achieve Water Quality Standards and restore beneficial uses.

It is important that the Sioux District Travel Management Plan be consistent with the TMDLs and Water Quality Plans that may be developed by the States of Montana and South Dakota (should there be any impaired streams within the Forest boundary in South Dakota in the future) to restore water quality and beneficial use support in impaired 303(d)-listed waters on the District. We also note that sources of pollutant loading may also occur in unlisted tributaries to listed streams, and TMDLs must account for all sources of pollution, hence there is a need to also address road related pollution sources in watersheds of 303(d) listed waters.

The Sioux District Travel Management analysis area appears to be within the Little Missouri River TMDL Planning Area, where a TMDL has not yet been started by the Montana DEQ (<http://deq.mt.gov/wqinfo/TMDL/2007TMDL%20Schedule.pdf>). We recommend that the Sioux Ranger District stay in communication with the Montana DEQ as well as EPA TMDL staff to assure consistency of the travel management and land management as TMDLs and Water Quality Plans are initiated by MDEQ (contact Dean Yashan, Robert Ray or Mark Kelley of the MDEQ in Helena at 444-5317, 444-5319 and 444-3508, respectively; and Ron Steg, EPA TMDL Coordinator for Montana in Helena at 457-5024). Proposed travel management should also be discussed with any local watershed groups that may get involved in TMDL and Water Quality Plan preparation.

6. We appreciate the inclusion of the “water quality conclusion” discussion on page 3-77, and the inclusion of DEIS Appendix D that identifies opportunities outside of this travel management proposal for additional reductions of water quality impacts. This information helps address a concern that we have that the current Travel Management Plan has a limited scope that fails to comprehensively address environmental effects of travel management. These limited scope Travel Plans simply designate routes open and closed to motorized travel, but fail to address many resource impacts of travel management (e.g., inadequate road maintenance and resultant poor conditions of roads, roads and motorized uses in sensitive locations and associated adverse water quality effects). The discussion on page 3-77 and Appendix D at least acknowledges that the current travel management planning process is only a first step, and that additional actions in the future are needed to comprehensively address environmental effects.

We appreciate this disclosure and encourage the Custer NF and Sioux District to conduct the additional actions identified in Appendix D to further reduce water quality impacts of roads and travel. We very much support improvements in road drainage and BMPs (i.e., installing waterbars, drain dips, and ditch relief culverts), relocating roads away from streams, reclaiming and decommissioning roads causing resource damages, removing and/or upgrading undersized culverts or culverts blocking fish passage, eliminating fords, and armoring stream channels at former road stream crossings, and reducing motorized uses in more erosive areas.

We are concerned, however, that adequate resources may not be available to implement the recommendations in Appendix D and other measures that may be necessary to address water quality impacts (page 1-11). It is known that prolonged under-funding of road maintenance on National Forests has resulted in degraded road conditions, and that there is a significant backlog of road maintenance needs on National Forests (Source: *"Rightsizing" the Forest Service Road System Part I: Road Trend Analysis*, March 22, 2007). We believe it is important to provide adequate funding to implement measures needed to address water quality effects of roads and motorized uses. There should be a continuing road inspection, evaluation and maintenance program in place to identify road drainage and BMP needs, including an inspection, evaluation and road maintenance program, and adequate funds to correct road deficiencies.

We encourage improved funding for road improvements and maintenance and emphasize the need for decommissioning of roads which cause resource damages and which cannot be adequately maintained. We believe road networks should be limited to those that are necessary for access and management, and which can be adequately maintained within agency budgets and capabilities.

7. We do not concur entirely with the statement that in most cases, the actual use, or mode of travel (motorized versus non-motorized) is inconsequential in terms of watershed effects (page 3-81). We believe motorized uses in general are more likely to accelerate erosional processes and worsen poor road conditions, and increase stream sedimentation and degradation of fisheries habitat when compared to non-motorized uses. Sediment yields are generally higher from roads than from trails, and from motorized trails than from non-motorized trails. Roads/trails often tend to become wider and rutted with heavy motorized use, creating a greater need for monitoring of road/trail conditions, and for road and trail maintenance for repair and erosion control.
8. It is stated that Alternative B proposes actions that result in a net decrease in risk to aquatic resources in all 12 moderate and high risk watersheds with fish resources or sensitive amphibians on the District (page 3-88), however, Table 3-25 appears to show more miles with increase in risk than decrease in risk in the Gap Creek watershed. It would appear, therefore, that there would be a net increase in risk to aquatic resources in the Gap Creek watershed. We recommend that Alternative B be amended so that it results in a net decrease in risk in the Gap Creek watershed, similar to the net decrease in other watersheds.
9. Specific areas of EPA concern regarding roads, include road drainage and surface erosion, adequate numbers of ditch relief culverts to avoid drainage running on or along roads; interception and routing of sediment to streams; culvert sizing and potential for washout; culvert allowance of fish migration and effects on stream structure and seasonal and spawning habitats; supplies of large woody debris; road density, number of road stream crossings; and road encroachment on stream, riparian, and wetland habitats. For your information, EPA's general recommendations regarding roads are to:

- * minimize road construction and reduce road density as much as possible to reduce potential adverse effects to watersheds;
- * locate roads away from streams and riparian areas and away from steep slopes, landslide prone areas, or erosive soils; as much as possible (roads at or near ridgetops have far fewer failures and generate far less sediment for streams than roads in lower slope positions);
- * minimize the number of road stream crossings;
- * stabilize cut and fill slopes;
- * provide for adequate road drainage and control of surface erosion with measures such as adequate numbers of waterbars, maintaining crowns on roads, adequate numbers of rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams;
- * ditch relief culverts should not be placed where they may discharge onto erodible slopes or directly into streams.
- * where possible install cross-drainage above stream crossings to prevent ditch sediments from entering streams.
- * consider road effects on stream structure and seasonal and spawning habitats;
- * allow for adequate large woody debris recruitment to streams and riparian buffers near streams.
- * construct road stream crossings during periods of low flow to avoid fish spawning and incubation periods, and/or dewater crossing stream segment prior to construction.
- * obliterate temporary roads constructed for timber sales before termination of the timber sale contract (and revegetate within ten years after the contract), and require contractors or permittees to restore natural drainage patterns (i.e., remove culverts and fill from waters of the U.S., remove cross drains and install water bars, etc.) and stabilize slopes (e.g., outsloping or contouring).

Culverts should be properly sized to handle flood events, pass bedload and woody debris, and reduce potential for washout, and should be properly aligned with the stream channel and designed and placed to allow for fish migration. Undersized culverts should be replaced and culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration should be adjusted. Bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody debris are recommended to minimize adverse fisheries effects of road stream crossings.

Road maintenance (e.g., blading) of unpaved roads in a manner that contributes to road erosion and sediment transport to streams and wetlands should be avoided. It is important that management direction assures that road maintenance be focused on reducing road surface erosion and sediment delivery from roads to area streams. Blading should only be conducted: 1) when the road surface becomes too rough for the designated vehicle use; 2) when the surface becomes a safety hazard; or 3) when it is needed to improve road drainage by reducing road surface erosion and sediment delivery from roads to area streams. Where possible do not remove vegetation growing in ditches draining in-sloped roads. Unpaved roads should not be graded (bladed) in a manner that

contributes to road erosion and sediment transport to streams and wetlands. Avoid routine general blading of ditch lines on in-sloped roads to maintain vegetative cover. Where necessary blade only the ditch segments where blockage problems occur. Graded material should not be sidecast over the shoulder, and shoulders should not be widened to encroach upon and have adverse effects upon streams, wetlands, and riparian areas adjacent to roads.

Road use during spring breakup conditions should also be avoided. Snow plowing of roads in a manner that adds sediment to streams and wetlands should be avoided. Snow plowing of roads when temperatures are above freezing should also be avoided to limit development of runoff created road ruts during thaws that increase road erosion (i.e., ruts channel road runoff along roads increasing erosion of the road surface, and sediment delivery from the road). The potential for snow plowing to cause runoff created ruts increases with snow plowing operations later in winter when there may be frequent thaws. Road maintenance staff should be aware of this concern, and limit late winter snow plowing to when it is absolutely necessary.

We are pleased that Forest Service Region 1 provides training for operators of road graders regarding conduct of road maintenance in a manner that protects streams and wetlands, (i.e., Gravel Roads Back to the Basics). If there are road maintenance needs on unpaved roads adjacent to streams and wetlands we encourage utilization of such training (contact Donna Sheehy, FS R1 Transportation Management Engineer, at 406-329-3312).

As you may know, there are also training videos available from the Forest Service San Dimas Technology and Development Center for use by the Forest Service and its contractors (e.g., "Forest Roads and the Environment"-an overview of how maintenance can affect watershed condition and fish habitat; "Reading the Traveled Way"-how road conditions create problems and how to identify effective treatments; "Reading Beyond the Traveled Way"-explains considerations of roads vs. natural landscape functions and how to design maintenance to minimize road impacts; "Smoothing and Reshaping the Traveled Way"-step by step process for smoothing and reshaping a road while maintaining crowns and other road slopes; and "Maintaining the Ditch and Surface Cross Drains"-instructions for constructing and maintaining ditches, culverts and surface cross drains).

10. Has the Custer NF and Sioux Ranger District evaluated or conducted a survey of fish passage on culverts on the District? Since culverts often impede fish passage we recommend that such a survey be conducted to identify culverts causing fish passage problems. A priority list of culverts requiring modification or replacement should then be developed.
11. Reductions in road density are important for improving watershed conditions and aquatic health in area streams. Areas with higher road density have been correlated with higher levels of stream sedimentation, and higher quality aquatic habitat and higher populations of fish are often associated with watersheds with low road density. We support

prioritizing decommissioning of roads close to streams rather than roads on upper slopes or ridges, and roads on sensitive soils or slopes or in landslide prone areas that have greater erosion potential, or roads within riparian areas to maximize water quality improvement benefits. We support as much road rehabilitation and road closure and decommissioning as possible, particularly removal of road stream crossings, and obliteration of illegally user created non-system roads causing resource damages. Where roads or trails are located in narrow valleys adjacent to streams where roads/trails cannot be decommissioned, we recommend consideration of use of vegetative plantings, silt fences, and/or rock or log placement along the stream banks and/or steep slopes to reduce sediment entry into the streams.

We also want to note that it is difficult to effectively restrict motorized access and protect public lands with simple gated road closures. Road rip-seed-slash (obliteration or full road recontour) is a more effective, and thus, preferred method of road closure. We advise removing and restoring stable drainage ways during road removal to address water quality concerns. It is important that adequate attention be directed to restoring natural drainages and culvert removal and revegetating natural landscapes by ripping, scarifying, and seeding disturbed areas with native seed.

Enforcement

12. Executive Orders 11644 and 11989, "Use of Off-Road Vehicles on Public Lands," require agencies to ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands. We support the effort to have understandable travel maps (Motor Vehicle Use Map, MVUM), and clearer travel management rules for the public, and encourage improved road and trails signs to promote understanding of travel rules, and thus, improved voluntary compliance with the travel plan.

We also believe restrictions on motorized travel, however, will not be effective in protecting sensitive resources without adequate enforcement. Policing and enforcement is necessary to promote compliance, and better ensure protection of water quality, fisheries, wildlife, and other sensitive resources. The discussion of enforcement in the Sioux District Travel Management Plan (pages 2-12 to 2-14) is improved over that in the Ashland District Travel Management Plan.

We have concerns regarding the adequacy of resources to enforce travel restrictions necessary for protection of the environment. The DEIS states that there is only one full time law enforcement officer stationed on the Custer NF (page 2-14), and that five permanent Forest Protection Officers (FPO) also have some limited law enforcement authority and responsibilities, and can issue citations for travel management violations.

We support adding law enforcement personnel to handle the increases in motor vehicle uses that are occurring on the District. We particularly recommend increasing

enforcement officer contact with off-road vehicle users and those violating motorized access restrictions on closed roads and trails; and increasing enforcement staffing on holidays and weekends, when much illegal motor vehicle use occurs.

Wetlands

13. EPA considers the protection, improvement, and restoration of wetlands to be a high priority. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. Possible impacts on wetlands include damage or improvement to: water quality, habitat for aquatic and terrestrial life, channel & bank stability, flood storage, ground water recharge and discharge, sources of primary production, and recreation and aesthetics. Roads and motorized uses in or near wetlands and riparian areas have potential to affect wetland integrity and function.

Executive Order 11990 requires that all Federal Agencies protect wetlands. In addition national wetlands policy has established an interim goal of **No Overall Net Loss of the Nation's remaining wetlands**, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base (see "Presidential Wetland Policy of 1993" at website, <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/aug93wet.htm>). Wetland impacts should be avoided, and then minimized, to the maximum extent practicable, and then unavoidable impacts should be compensated for through wetland restoration, creation, or enhancement.

It is important that appropriate limitations and restrictions be placed on motorized vehicle use to protect against degradation of wetlands and other sensitive areas. The DEIS states that the Forest Plan includes objectives that recognize the unique values of key habitats including wetlands and riparian areas, and that management direction should be designed to protect these areas (page 3-64). We did not see much other discussion, however, regarding potential impacts of travel management alternatives on wetlands, and if any impacts occur, how they will be mitigated (i.e., mitigation means sequence of avoidance, minimization, rehabilitation, and compensation for unavoidable impacts). We believe the FEIS should include some disclosure of potential travel management impacts upon wetlands, and if no impacts are expected, at least state that.

Monitoring

There should be an effective program for monitoring, evaluation and adaptive management to assure that effects of travel management are identified and management modified where necessary to reduce adverse effects. As evidenced in our prior comments we are concerned about effects of roads and motorized uses on water quality, aquatic habitat and fisheries, as well as other resources such as wildlife habitat, sensitive plants. Given the acknowledged impact of roads/trails and motorized uses on water quality and fisheries and other resources such as wildlife, sensitive plants, etc., it is important to monitor effects of travel and public recreation on these resources.

The DEIS states (page 2-17) that, “information collected through monitoring and through public user groups and individuals will be used in evaluating and revising travel management decisions,” and that “designations identified on the motor vehicle use map are subject to revision based on this information,” and Table 2-5 (page 2-18) shows Forest Plan monitoring items relevant for travel management.

We are pleased that the DEIS states that roads or trails will be closed if monitoring shows that motor vehicle use is causing or will cause considerable adverse effects on public safety or soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources. This is exactly the type of monitoring, evaluation and adaptive management program for travel management that we believe is needed. Effects of travel need to be identified through monitoring, so that they can be mitigated. It is through the iterative process of setting goals and objectives, planning and carrying out travel management, monitoring impacts of travel management, and feeding back monitoring results to managers so they can understand effects and make needed adjustments to mitigate effects, that adaptive management works.

We also recommend that mechanisms for public disclosure of the monitoring analysis and the decisions for the Travel Plan be provided. The roles of the Forest Service, other Agencies, independent science, and the public should be identified. The FEIS should discuss the future decision points in this adaptive process that may require additional NEPA analysis. The FEIS should also discuss the funding is available for monitoring and adaptive management.

Recreation

14. We appreciate the discussion of outdoor recreation in the DEIS (beginning on page 3-4), including the tables Recreation Opportunity Spectrum (ROS) setting and classification and miles of road by alternative (Tables 3-3 through 3-5). While we recognize that a balance of motorized and non-motorized recreational opportunities need to be provided, we have concerns that motorized uses contribute more to resource and environmental damage than non-motorized uses. Motorized uses push wildlife onto smaller and smaller patches of habitat; reducing migration corridors; increasing adverse effects to wildlife habitat and security; causing soil erosion and adverse effects to water quality and aquatic habitat and fisheries; spreading weeds; and increasing opportunity for vandalism of historic properties.

Motorized uses also have the potential to degrade the quality of experience and solitude desired by non-motorized uses (e.g., hiking, viewing natural features and wildlife). It appears that the no action alternative provides the greatest opportunity for motorized recreation, and least opportunity for non-motorized recreation without effects of motorized uses. Alternative B appears to provide the most opportunities for non-motorized recreation, but still none of the area appears to be designated for less damaging non-motorized uses from Dec 1 to Oct 15, and only 28% of the area is designated for less damaging non-motorized uses from Oct 16 to Nov 30 (Tables 3-4, 3-5, page 3-10).

We support increasing opportunities for non-motorized uses such as viewing wildlife or natural features in solitude. We believe motorized activities should be limited so that they only occur in a manner and location that minimize effects to other public uses, and are consistent with protection of natural features, wildlife, and other resources. This provides further reason for our recommendation to amend Alternative B, to provide greater limitations on motorized uses to allow greater levels of protection for wildlife, natural features, and other resources that are used by the public.

15. We support the limitation of vehicle access to dispersed campsites to only 300 feet from designated routes (pages 3-6). We also recommend that special limitations should be considered to limit vehicle access even more if necessary to assure that motorized access does not damage ecologically sensitive resources.

EPA encourages locating campground facilities, and concentrated public recreational uses away from ecologically sensitive resources. We believe motorized access to camping sites in ecologically sensitive areas should be restricted even if they are within 300 feet of designated routes. It would be helpful and appropriate to identify and designate camping sites that avoid sensitive areas, and/or to encourage camping or concentrated public use in areas that are more resilient and can more easily recover from impacts and/or accommodate public use with less impacts.

Wildlife

16. We believe the Travel Plan should avoid adverse impacts upon species of special concern, and contribute to recovery of listed species, and should maintain and protect high quality wildlife habitat and linkage corridors for productive and diverse populations of wildlife species (species viability). Wildlife connectivity and security should be maintained or improved and wildlife fragmentation and displacement should be reduced.

It is known that motorized use increases wildlife encounters with humans which can result in habitat degradation, displacement, increased wildlife mortality, changes in behavior, increased stress, and reduction of reproductive success. We support adequate limitations on motorized travel and road density for protection of wildlife habitat and security, and key corridors for wildlife migration.

We are pleased that the DEIS states that the preferred alternative will have “no effect” on the threatened black-footed ferret (page 3-43). We are also pleased that the preferred alternative would have “no impact” on sensitive species (peregrine falcon, Baird’s sparrow, Bald eagle, black-backed woodpecker and others).

EPA recommends that the final EIS and Record of Decision include documentation of U.S. Fish & Wildlife Service concurrence with the biological assessment upon the threatened black-footed ferret. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of significant impacts, perhaps additional

mitigation measures, or changes to the preferred alternative.

Vegetation

17. The DEIS indicates 14 miles of routes in areas of moderate vegetative risk with Alternative B, and 24 miles with Alternative A (Table 3-30, page 3-103). We are pleased that the DEIS indicates that the preferred alternative shows a decrease in risk to vegetation over no action and Alternative A. Damage to vegetation is more likely to occur from motorized uses or user-built access roads and associated campsites.
18. We are pleased that the DEIS includes discussion of travel management impacts on the spread of noxious weeds (beginning on page 3-104). Noxious weeds are a great threat to biodiversity. Weeds can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Noxious weeds tend to gain a foothold where there is disturbance in the ecosystem, such as road construction and where off-road vehicles disturb soils.

EPA supports the need to minimize noxious weed infestation, and we were very pleased with the Custer National Forest 2006 Weed Management EIS that described the Forest's Integrated Weed Management Program. We agree with the DEIS statement that use of motorized routes contributes to the spread of weeds (page 3-105). In fact, we believe motorized vehicles—cars, trucks, ATVs, motorcycles, and even snowmobiles—may be the greatest vector for spread of weeds. A single vehicle driven several feet through a knapweed site can acquire up to 2,000 seeds, 200 of which may still be attached after 10 miles of driving (Montana Knapweeds: Identification, Biology and Management, MSU Extension Service.)

We believe an effective noxious weed control program must include restrictions on motorized uses, particularly off-road uses. Off-road vehicles are designed to, and do, travel off-trail, disturbing soil, creating weed seedbeds, and dispersing seeds widely. Weed seed dispersal from non-motorized travel is of lesser concern because of fewer places to collect/transport seed, and the dispersal rate and distances along trails are less with non-motorized travel.

Table 3-32 (page 3-108) evidences that Alternative B has the lowest risk of weed invasion, although 149 acres are still shown with risk of weed invasion under Alternative B. We encourage additional limitations of motorized uses to reduce threat of weed spread. For your information, measures we often recommend for preventing spread from source areas to uninfested areas include:

- ▶ Ensure that equipment tracks and tires are cleaned prior to transportation to an uninfested site.
- ▶ Focus control efforts at trail heads and transportation corridors to prevent tracking of seed into uninfested areas.
- ▶ Attempt to control the spread from one watershed to another to reduce water as a

transport vector.

- ▶ If a localized infestation exists and control is not a viable option, consider rerouting trails/roads around the infestation to reduce available vectors for spread.
- ▶ Establish an education program for industrial and recreational users and encourage voluntary assistance in both prevention and control activities.
- ▶ Reseed disturbed sites as soon as possible following disturbance.

We also note that hay can be a source of noxious weed seed. Hay/straw is used as mulch to slow erosion and encourage seed germination, and used to feed horses in hunting and recreation camps, and as wildlife feed during harsh winters. The Federal Noxious Weed Act of 1974 prohibits the interstate transport of noxious weeds or weed parts, such as seed. Cattle that are released on grazing allotments or horses used on public lands can transport undigested weed seed and spread it in their manure. Weed free seed forage should be required for backcountry users.

Air Quality

19. Thank you for providing the brief discussion of air quality in Chapter 2 (page 2-5). We agree that compliance with State and Federal air quality standards is likely to occur due good air dispersion characteristics and low potential for inversions and reduced or equivalent route miles open to motorized vehicles under all alternatives compared to the existing condition.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.